Ref. 4

METHOD FOR REFINING FISH OIL

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- European:
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Abstract of **JP 8302382 (A)**
PURPOSE: To effectively deodorize and bleach a fish oil to give a high-quality refined fish oil in a high yield by bringing a fish oil into contact with a polar adsorbent resin under a reduced pressure. CONSTITUTION: A synthetic adsorbent or an ion-exchange resin is used as a polar adsorbent resin. A pref. synthetic adsorbent is a methacrylic acid-based one having a particle size of 1-0.5mm, a micropore size (by mercury porosimetry) of 1-1.15ml/g, and a specific surface area of 450-550m<2> /g. A pref. ion-exchange resin is a styrene-based, strongly basic anion-exchange resin having a particle size of 0.4-0.6mm. A fish oil is pref. brought into contact with the adsorbent resin by a method using a column. The voids of the column in the filled state is pref. 20-40%, and the space velocity is pref. 0.5-1l/hr.; The contact is done using a fish oil as it is or in the presence of water and an org. solvent in a vacuum of 300mmHg or lower, pref. 100mmHg or lower, pref. at 10-20 deg.C. Steam distillation may be used jointly.

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Title: **Method for Refining Fish Oil**

Claims:

1. A method for refining fish oil by bringing a fish oil into contact with a polar adsorbent resin under a reduced pressure.

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Detailed Description of the Invention

[0001]

The present invention relates to a method for deodorizing and bleaching of fish oil.

[0002]

[Prior art]

Recently, the physiological actions of fish oils were clarified. Among them, multivalent unsaturated fatty acids such as docosahexaenoic acid (DHA), eicosapentaenoic acid (EPA) and the like are noted. However, when these fish oils are taken as usual food, it is necessary to deodorize the smell completely. In the case where they are taken in a capsule form, it is also necessary to remove fishy smell as much as possible, because it is sometimes sensed as a belch smell after taking them. Further, when the fish oil is added to food, the more bleached the oil is, the more wide range of foods it may be added to.

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[0005]

[Means for solving the problems]

The inventors of the present invention have eagerly studied these problems and, as a result, found that when the fish oil is brought to contact with a polar adsorbent resin under a reduced pressure, the fish oil with almost no fishy smell is obtained and further

bleaching is also attained. The present invention was thus completed. The present invention will be explained in detail as shown below. As the fish oil used in the present invention, it is not particularly defined when it is derived from fish. For example, eye socket fat of tuna, bonito and the like, fish body oil obtained from tuna, sardine, salmon, herring, mackerel, saury and the like, cod-liver oil of squid, walleye pollack and the like may be mentioned. However, the present invention is preferably suitable for refining fish oils derived from eye socket fat and fish body oil, having a large content of unsaturated fatty acids.